LXVII.—Notes on the Beech-Martens of the Palearctic Region. By G. E. H. BARRETT-HAMILTON.

Through the kindness of Mr. Abel Chapman I have been permitted to examine the skin and cranium of a marten from Andalucia. This specimen, though it agrees in general size and in cranial characters with Martes foina, is very distinct both from that animal and from M. martes in coloration, but is indistinguishable from specimens in the British Museum collection from Xanthus, in Asia Minor, and from Kandahar. In the Afghanistan region, however, there is another form—M. leucolachnea—of which the British Museum collection possesses a specimen from Hazara, in Afghanistan, and a second from Vernoë, in Turkestan. Finally, a third form—M. toufæa—is represented in the same collection by specimens from Gilgit, Hunya (Cashmere), and from Tibet.

Probably all these forms intergrade with each other in the intermediate regions, and their treatment presents many difficulties, in illustration of which I need only quote the remark of Mr. W. T. Blanford*, that "probably the martens, like the cats, comprise a large number of incipient species, imperfectly differentiated. This is Severtzoff's view also." They may be treated as distinct species, or as varieties or subspecies of the typical M. foina, according to the individual preference of the investigator; but it will be useful to give a concise review of the characters by which they may usually

be distinguished from one another.

General characters † (common to all the foina group).— Third upper premolar convex externally; external margin of the fourth upper premolar exceeding in length the transverse diameter of the single upper molar; external margin of hindmost tooth incurved and bilobed.

The subspecies are

Mustela foina, Erxleb. (Syst. R. An. 1777, p. 458),

which has the throat-patch pure white, the fur close in texture and of a dark brown colour, the underfur greyish white, and the tail not bushy.

* 'Scientific Results of the Second Yarkand Expedition,' Mammalia, p. 29.

[†] For further details see Blasius, Säugeth. Deutsch. pp. 213-219, and R. Hensel, in Archiv für Naturgeschichte, 1853, pp. 17-22 (with plate).

Mustela mediterranea, sp. n.

which has the throat-patch * not pure white as in M. foina, but tinged with yellow and nearly as bright as that of a specimen of M. martes from Co. Kerry, Ireland (B. M. coll. no. 94. 3. 27. 1), though not nearly so bright as is the case with ordinary continental or British examples of the same species, the richest in this respect being one from Sardinia (B. M. coll. no. 95. 4. 16. 1). The general colour of the fur is not dark brown as in M. foina, but reddish brown, redder than in M. leucolachnæa, but resembling the colour of M. toufæa, from which species M. mediterranea may, however, be readily distinguished by the far lighter, nearly white, colour of the underfur. The colour of the tail is slightly darker than that of the body; it is less bushy than that of M. toufæa and M. leucolachnæa, but more so than in M. foina. The texture of the fur is woolly.

The type is in the British Museum collection (no. 98. 3. 18. 1), and was purchased by Mr. Abel Chapman in Andalucia,

where it was killed in the Sierra de Jerez.

Mustela leucolachnwa, Blanford

(op. cit. 1879),

which has the throat-patch white, the colour of the fur sepiabrown, very slightly redder than in *M. foina*; the texture of the fur woolly, and the underfur very light in colour.

Mustela toufæa, Hodgson

(J. A. S. B. 1842, p. 281; Blyth, J. A. S. B. 1847, p. 353),

which has the throat-patch slightly yellowish; the texture of the fur closer than in *M. leucolachnæa*; the underfur of the same colour, reddish sepia-brown, as the longer hairs.

Key to the Species.

a'. Underfur lighter than the longer hairs.

* The throat-patch i

^{*} The throat-patch in the specimens of M. mediterranea which I have been able to examine extends to the region between the fore legs, and in some cases reaches them. I do not, however, regard this character as of any importance, since the extent of the throat-patch in the martens, both of the present group and in the case of M. martes, seems to be very variable. It may or may not reach the legs, it may enclose islands of the darker fur, or may surround a peninsula of dark fur running anteriorly up the breast from the belly.

z'. Fur woolly	M. leucolachnæa.
c''. Fur not woolly	M. foina.
a". Fur of uniform colour throughout	M. toufæa.

There remains the supposed species M. intermedia, the name given by Severtzoff* to specimens which he described as being intermediate in character between M. martes and M. foina. As, however, the only intermediate character specified was the colour of the throat, and the whole description of the supposed species is inadequate, I can only for the present treat this name as a synonym of M. martes. I imagine that the description was made through ignorance of the variability of the colour and size of the throat-patch in the martens.

LXVIII.—Note on the Tunicate Fauna of Australian Seas. By W. A. HERDMAN, D.Sc., F.R.S., Professor of Natural History in University College, Liverpool.

For some years I have been engaged in studying a large collection of Australian Tunicata sent to me by the Trustees of the Australian Museum at Sydney, in order that I might prepare one of their museum catalogues. That work is now finished: I have returned the collection of type specimens to the Curator of the Australian Museum, and have deposited the MS. and drawings of the catalogue † in the hands of the Agent-General for New South Wales. As I understand it may be some time before the Trustees of the Museum are able to publish this catalogue, I think it will be useful if I make known to fellow-workers what species are described in my MS. I also add to the list other species which have been described from Australia but are not represented in the museum collection, so as to make this a complete record of the Tunicate fauna of Australian seas so far as is known to me.

LIST OF AUSTRALIAN TUNICATA.

In the following list the sixty-three species described and figured as new in the Catalogue of the Tunicata in the Australian Museum are denoted by an asterisk.

^{*} Proc. Mosc. Soc. Nat. vol. viii. p. 2 (1873), translated by J. Carl Cræmers in Ann. & Mag. Nat. Hist. 1876, ser. 4, vol. xviii. pp. 45, 46. † Over 300 pages of description and 45 octavo plates.